

REMARKS

The amendments set out above and the following remarks are believed responsive to the points raised by the Office Action dated October 22, 2003. In view of the amendments set out above and the following remarks, reconsideration is respectfully requested.

Claims 1-10 have been cancelled. Claims 11-20 remain pending.

Claims 11-20 were objected to for the use of the terminology, "first second", "second second", "third second", etc., to designate different electrode layers. The claims have been amended to define the invention more clearly. No new matter has been added, the basis for the amended claim language may be found within the original specification, claims and drawings. Applicant respectfully submits that with these amendments, the objection has been overcome and should be withdrawn.

Claims 11, 12, 14-17, 19, and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,693,962 to Shi et al. (hereinafter referred to as "Shi") in view of U.S. Patent No. 5,707,745 to Forrest et al. (hereinafter referred to as "Forrest"). This rejection is respectfully traversed.

The present invention is directed to a matrix arrangement including, *inter alia*, a first electrode layer covering a surface of an insulating substrate and a separator defining and separating a plurality of first and second cells on the first electrode layer. The first cells have stacked sequentially therein, a first organic material layer, a second electrode layer, a second organic material layer, and a third electrode layer, while the second cells have stacked sequentially therein, the second organic material layer and the third electrode layer. In claim 12, the first cells also have a third organic material layer and a fourth electrode layer, the second cells have the third organic material layer and the fourth electrode layer stacked sequentially on the second organic material layer and the third electrode layer, and third cells have stacked sequentially therein, the third organic material layer and the fourth electrode layer.

Thus, in the present invention, the first, second, and third cells each contain a different number of layers. According to the present invention, each cell emits a single color and the organic material layer nearest the first electrode determines the color emitted from the pixel. For example, the first cells emit the color produced by the first organic material layer, the second cells emit the color produced by the second organic material layer, and (when present) the third cells emit the color produced by the third organic material layer.

In contrast, Shi merely discloses cavities, i.e., subpixels, containing a single layer of electroluminescent media. As the Office Action correctly notes, Shi fails to disclose first pixels including a second organic material layer and a third ("second second") electrode layer stacked

on the first organic material and the second (“first second”) electrode. However, the Office Action goes on to assert that it would have been obvious to use the RGB pixel of Forrest as the pixels of Shi because the RGB pixel allows for three colors from the same pixel. Applicant respectfully disagrees.

There is simply nothing in Shi that would lead one of skill in the art to replace the subpixels of Shi with the RGB pixel of Forrest. The array of Shi is capable of full color image display using the three sub-pixels, each having a single, specific electroluminescent media capable of emitting a different hue. There is no suggestion in Shi of any need for emitting three colors from a single pixel. Furthermore, even assuming, *arguendo*, that one of skill in the art was led from the teaching of Shi to Forrest, one would not arrive at the present invention.

Forrest discloses an organic light-emitting device including at least ~~first and second~~ organic LEDs, and preferably three LEDs stacked one upon the other. Each LED of Forrest is capable of emitting a different color light. Thus, each stack in Forrest can emit blue, green, *and* red light (see e.g., Abstract and Figures 2A-2C). The LED on top emits one color of light through the middle and bottom LEDs, and the middle LED emits a different color light through the bottom LED (see e.g., Figures 2A-2C).

Replacing the subpixels of Shi with the RGB pixel of Forrest would result in each cell containing *three* organic LEDs, i.e., *three* layers of organic electroluminescent material. However, the cells of the present invention contain different numbers of layers of organic material, e.g., in claim 11, first cells contain two layers of organic material and second cells contain one layer of organic material and in claim 12, first cells contain three layers of organic material, second cells contain two layers, and third cells contain one layer. Accordingly, *prima facie* obviousness has not been established since important features of the claims are absent from the references.

For the reasons set forth above, reconsideration of the rejections is respectfully requested.

In view of the amendment and remarks recited herein, the application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue.

In re Appln. of WERNER HUMBS
Application No. 10/085,619

If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

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